INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.



Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner 100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

April 5, 2012

VIA CERTIFIED MAIL 91 7190 0005 2710 0020 7012

Mr. James Townsend U.S. Army Corps of Engineers Louisville District P.O. Box 59 Louisville, Kentucky 40201-0059

Dear Mr. Townsend:

Re: Section 401 Water Quality Certification Project: 2012 Reissuance of Nationwide Permits

The Indiana Department of Environmental Management (IDEM) has reviewed the notice in the Federal Register dated February 21, 2012, which begins the 60 day Clean Water Act Section 401 Water Quality Certification process for the reissuance of Nationwide Permits. We have also reviewed your correspondence dated February 24, 2012, stating the notice in the Federal Register is the Corps of Engineers application for Water Quality Certification under Section 401 of the Clean Water Act for the Nationwide Permits that will result in a discharge in the State of Indiana. The Nationwide Permits and general conditions became effective on March 19, 2012. The U.S. Army Corps of Engineers has reissued certain Nationwide Permits (NWPs), modified several existing NWPs, and introduced 2 new NWPs.

The Louisville, Detroit, and Chicago Districts of the U.S. Army Corps of Engineers developed the existing Indiana Regional General Permit No. 1 (RGP #1) to replace several NWPs. As a consequence of this action, the following NWPs have been, and will continue to be suspended for the State of Indiana and do not require Section 401 Water Quality Certification:

NWP 7 Outfall Structures and Associated Intake Structures NWP 11 Temporary Recreational Structures NWP 13 Bank Stabilization NWP 14 Linear Transportation Projects NWP 15 U.S. Coast Guard Approved Bridges NWP 18 Minor Discharges NWP 19 Minor Dredging NWP 25 Structural Discharges NWP 29 Residential Developments NWP 36 Boat Ramps

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NWP 39 Commercial and Institutional Developments NWP 40 Agricultural Activities NWP 41 Reshaping Existing Drainage Ditches NWP 42 Recreational Facilities NWP 43 Stormwater Management Facilities NWP 44 Mining Activities

It is the judgment of this office that NWPs 1, 2, 3, 4, 5, 6, 9, 10, 12, 21, 22, 24, 27, 28, 30, 33, 37, 45, 46, 49, 50, 51, 52 will comply with applicable provisions of state law (including 327 IAC 2) and Sections 301, 302, 303, 306, and 307 of the Clean Water Act subject to the conditions set forth in this Certification. IDEM hereby grants Section 401 Water Quality Certification for these NWPs with the following General Conditions and Nationwide Permit Specific conditions:

GENERAL CONDITIONS

The following conditions shall apply to any permittee whose project qualifies under any NWP approved by this certification. All activities that do not meet these conditions require an individual Water Quality Certification from the IDEM and are not authorized under this WQC.

- 1) The permittee shall deposit any dredged material in a contained upland disposal area to prevent sediment runoff to any waterbody.
- 2) This WQC does not authorize the discharge of pollutants, principally sediment, associated with storm water. These discharges are regulated through the storm water general permit program and are applicable to land disturbing activities of one or more acres in size or are part of a larger common plan. Currently, this Water Quality Certification incorporates the conditions at 327 IAC 15-5-7(b)(1), 7(b)(5), and 7(b)(8) through 7(b)(20) as general conditions for all construction sites regardless of size. Compliance with the general permits at 327 IAC 15-5 or 327 IAC 15-6 (commonly referred to as a Rule 5 and Rule 6 respectively) is sufficient to demonstrate compliance with this condition of the WQC.
- 3) The permittee shall allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials to conduct the following activities:
 - a) enter upon the permittee's property;
 - b) have access to and copy at reasonable times any records that must be kept under the conditions of these permits or this certification;
 - c) inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation site; and
 - d) sample or monitor any discharge of pollutants or any mitigation site.

4) This granting of WQC does not relieve the recipient of the certification from the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person.

5) This WQC does not:

- a) authorize impacts or activities outside the scope of this certification;
- b) authorize any injury to permittees or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
- c) convey any property rights of any sort, or any exclusive privileges;
- d) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
- e) authorize changes in the plan design detailed in the application.
- 6) This WQC does not authorize point source discharges of pollutants other than clean fill¹ and uncontaminated dredged material.
- 7) This WQC does not authorize activities on or in any of the State's waters that have been designated as salmonid waters (cold water streams), tributaries of salmonid waters within a two river mile reach upstream from the confluence with the salmonid water, or Outstanding State and/or National Resource Waters (see Attachment #1).
- 8) This WQC does not authorize activities on or in any critical wetland or critical special aquatic sites (see Attachment #2).
- 9) The permittee must demonstrate, via letter from the Indiana Department of Natural Resources, Division of Nature Preserves, that no state endangered, threatened, or rare species are documented on a permanent or seasonal basis within a 1/2-mile radius of the proposed project site by the Indiana Natural Heritage Data Center, or must provide documentation from the Indiana Department of Natural Resources that states that the activities proposed will not constitute a violation of state laws protecting these species.
- 10) This WQC does not authorize activities associated with the establishment of a mitigation bank.
- 11) This WQC allows the use of multiple NWPs on the same project as long as the cumulative effect for the entire project is less than the specified impact thresholds identified in the approved NWP or as specified in this WQC. If a project exceeds

¹ Clean fill, for the purpose of this Water Quality Certification, means uncontaminated rocks, bricks, concrete without rebar road demolition waste materials other than asphalt, or earthen fill.

the specified impact thresholds, the activities are not authorized by this WQC and an individual WQC is required. The IDEM may certify several federal permits or licenses under one individual WQC.

- 12) In order to verify that a given project will qualify under the terms and conditions of this certification, IDEM may require additional information from the applicant. If the applicant fails to provide any information requested by IDEM, then the project is not authorized.
- 13) All stream pump-around activities must be discharged in a manner that does not cause erosion at the outlet. Cofferdam dewatering activities must use filter bags, upland sediment basins/traps, or a combination of other appropriate sediment control measures to minimize the discharge of sediment-laden water into waters of the U.S. All sediment control measures must be installed and maintained in good working order. For stream pump-around activities, the in-stream material used to construct the dam must be constructed of non sediment producing sources. Examples include sand bags and sheet pile walls.
- 14) Ensure all discharges of riprap into streams are flush with the upstream and downstream bank and stream channel elevations and grades.
- 15) The activity would not result in a permanent secondary effect to waters of the U.S. (e.g., dredging, excavation, damming, creation of in-channel ponds) that when combined with the primary effect exceeds the area and length thresholds specified above.
- 16) Notification to IDEM is required for any project authorized by a NWP for which the District Engineer has issued a waiver for intermittent and stream impacts greater than 300 feet. IDEM will review the notification within 30 days to determine whether or not IDEM will elevate the NWP to an Individual Water Quality Certification or authorize it as submitted.
- 17) The department, for any project that qualifies under the terms and conditions of this certification, may choose to require an individual Water Quality Certification if it determines that the project would have more than minimal impacts to water quality, either viewed individually or collectively with other projects that may affect the same waterbody affected by the proposed project.

NATIONWIDE PERMIT #3, MAINTENANCE, SPECIFIC CONDITIONS

The following conditions apply to NWP #3. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

- 1) For activities involving the replacement of a stream encapsulation:
 - a) The replacement will not reduce the cross-sectional area under bank full elevation;
 - b) The replacement will not increase the length of the total encapsulation to over 150 feet;
 - c) The replacement will have either the same slope as the existing encapsulation, or will more closely match the slope of the stream² immediately upstream and downstream;
 - d) The type of encapsulation is the same as the existing type of encapsulation;
 - e) Bank stabilization and channel bottom stabilization do not exceed either one bank full width upstream and downstream of the replacement encapsulation or ten linear feet whichever is greater;
 - f) Any channel bottom stabilization is flush with the existing grade of the stream bottom; and
 - g) Existing encapsulations over 150 feet may be replaced under this NWP as long as the structure length does not change more than 20 feet upstream and 20 feet downstream.

 For activities undertaken by the Indiana Department of Transportation (INDOT) that involve the placement of thermal plastic liners or other liner types into existing structures.

- a) The activity is reviewed and approved by the INDOT Office of Hydraulics;
- b) The liner size must be the largest size approved by the INDOT Office of Hydraulics; and
- c) Riprap scour protection is flush with the upstream and downstream bank and stream channel elevations and grades.
- 3) For all other maintenance activities:
 - a) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
 - b) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation or the slope of a stream;

² Stream, for the purpose of this Water Quality Certification, means waters of the U.S. that have a defined bed and bank and convey water ephemerally, intermittently or perennially. This term includes natural streams, relocated streams, channelized streams, artificial channels, encapsulated channels and ditches.

- c) The activity will permanently affect 300 linear feet or less of stream channel, streambank, or lake shoreline;
- d) In the case of bank stabilization activities, the permittee demonstrates that the bank or shoreline in question is unstable;
- e) The activity will not result in a permanent secondary effect to waters of the United States (e.g., dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above; and
- f) Any channel bottom stabilization is installed flush with the existing stream grade.

NATIONWIDE PERMIT # 12, UTILITY LINE ACTIVITIES, SPECIFIC CONDITIONS

The following conditions apply to NWP #12. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

- The permittee notifies the IDEM at least 30 days prior to the activity unless the only regulated activity is the construction of a stream crossing where the crossing is constructed using directional boring or other related technique that does not involve the placement of fill materials within a regulated waterbody. Other forms of crossings, such as trenching, pipeline armoring, etc., require notification to IDEM;
- Notification to the IDEM is required for any pipeline project that involves crossing wetlands and will involve restoring the wetlands to pre-construction grade, contours, and vegetative conditions. A copy of the restoration plan must be submitted with the Notification Form;
- 3) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
- 4) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation of the slope of a stream;
- 5) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline;
- In the case of bank stabilization activities or new lake and reservoir shoreline stabilization activities, the permittee demonstrates that the bank or shoreline in question is unstable;
- 7) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above;

- 8) The activity will not result in a permanent cumulative conversion of forested wetlands or scrub shrub wetlands greater than one-tenth (0.1) of an acre;
- 9) For in-stream utility line stabilization activities, the use of articulated or other matting is only authorized if the utility is only partially (<10%) exposed. Fully exposed utility stabilization activities are not authorized by this WQC; and
- 10) If a utility line is placed beneath the bed of a river or stream, the following conditions must be met:
 - a) Cover of at least three (3) feet, measured perpendicularly to the line, between the lowest point of the stream bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials; and
 - b) Cover of at least one (1) foot, measured perpendicularly to the line, between the lowest point of the bed and the top of the utility or its encasement, whichever is higher, if the bed is composed of consolidated materials.

NATIONWIDE PERMIT #27, AQUATIC HABITAT RESTORATION, ESTABLISHMENT, AND ENHANCEMENT ACITIVITIES, SPECIFIC CONDITIONS

This WQC authorizes activities under NWP #27 when they have a minimal effect on water quality, are a component of a restoration program previously approved by the IDEM, or involve certain activities undertaken by the Abandoned Mine Land (AML) Program administered by the IDNR. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

- 1) An activity qualifies for this NWP because it will have a minimal effect if:
 - a) The activity will permanently affect one-tenth (0.1) of an acre or less of Waters of the United States;
 - b) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline; and
 - c) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above.
- 2) An activity qualifies for this NWP because it is a component of a restoration program previously approved by the IDEM if:

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- a) The activity occurs within the same sub-watershed³ as a water that the IDEM has identified as impaired; and
- b) The IDEM identified the activity as beneficial for reducing or eliminating the impairment in a Total Maximum Daily Load (TMDL), an IDEM approved Watershed Plan or a Memorandum of Agreement or Memorandum of Understanding with the agency sponsoring the restoration or enhancement activities.
- 3) An activity qualifies for this NWP because it is a qualifying AML project if:
 - a) The activity is undertaken by the IDNR, Division of Reclamation, AML Program;
 - b) The activity is designed to improve water quality in an impaired water of the United States where the source of impairment is acid mine contamination;
 - c) The activity facilitates the treatment of acid mine drainage or covers a source of impairment⁴; and
 - d) The activity does not result in the discharge of dredged or fill material into any wetland, stream, or other Waters of the United States that are unimpaired by acid mine drainage unless that discharge qualifies under specific condition #1 above.
- 4) The permittee notifies the IDEM at least 30 days prior to the activity for all projects which require the installation or removal of any water control structures, dikes, berms, or accumulated sediment. IDEM will review the notification within 30 days to determine whether or not IDEM will elevate the NWP to an Individual Water Quality Certification or authorize it as submitted.

NATIONWIDE PERMIT #37, EMERGENCY WATERSHED PROTECTION AND REHABILITATION, SPECIFIC CONDITIONS

The following conditions apply to NWP #37. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

 The activity is consistent with a Memorandum of Agreement or Memorandum of Understanding between the IDEM and the Natural Resources Conservation Service, the United States Forest Service, the Department of the Interior, the Farm Services Agency, or the IDNR. This agreement must be in place prior to the emergency

³ For the purpose of this WQC, sub-watershed means the U.S. Geological Survey's 14-digit Hydrologic Unit Code (HUC).

⁴ AML projects that qualify generally consist of damming or relocating waters carrying acid mine contamination to divert flow into constructed treatment systems.

situation and must ensure that the emergency activities authorized under NWP #37 will not cause or contribute to permanent water quality degradation or impairment.

NATIONWIDE PERMIT #46, DISCHARGES TO DITCHES, SPECIFIC CONDITIONS

The following condition applies to NWP #46. All activities that do not meet this condition require an individual WQC from the IDEM and are not authorized under this WQC.

1) The activity will not permanently change the velocity, cross sectional area under the bank full elevation or the slope of the ditch.

NATIONWIDE PERMIT #51, LAND-BASED RENEWABLE ENERGY GENERATION FACILITIES, SPECIFIC CONDITIONS

The following conditions apply to NWP 51. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

- 1) The permittee notifies the IDEM at least 30 days prior to the activity;
- 2) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
- 3) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation of the slope of a stream;
- 4) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline; and
- 5) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above.

NATIONWIDE PERMIT #52, WATER-BASED RENEWABLE ENERGY GENERATION PILOT PROJECTS, SPECIFIC CONDITIONS

The following conditions apply to NWP 52. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) The permittee notifies the IDEM at least 30 days prior to the activity;

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- 2) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
- 3) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation of the slope of a stream;
- 4) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline; and
- 5) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above.

Any changes in the language or scope of any NWP not detailed in the Federal Register notice dated February 21, 2012, are not authorized by this certification. Additionally, the Indiana Department of Environmental Management retains the right to review, modify, terminate, replace or amend this certification as needed to ensure that the federal permits or licenses certified do not result in violations of Indiana's Water Quality Standards or other applicable state laws. In the absence of another action by IDEM that would alter the termination date of this certification, this certification shall expire with the expiration of the federal permits it certifies.

Summary of Section 401 Water Quality Certification Decisions and Conditions for Nationwide Permits.

NWP	Activity	Decision	Conditions
1	Aids to Navigation	Approve	General
2	Structures in Artificial Channels	Approve	General
3	Maintenance	Approve	General & Specific
4	Fish and Wildlife Harvesting, Enhancement, and	Approve	General
	Attraction Devices		
5	Scientific Measurement Devices	Approve	General
6	Survey Activities	Approve	General
8	Oil and Gas Structures on Outer Continental Shelf	Deny	N/A
9	Structures in Fleeting and Anchorage Areas	Approve	General
10	Mooring Buoys	Approve	General
12	Utility Line Activities	Approve	General & Specific
16	Return Water from Upland Contained Disposal Areas	Deny	N/A
17	Hydropower Projects	Deny	N/A
20	Response Operations for Oil and Hazardous	Deny	N/A
	Substances		
21	Surface Coal Mining Activities	Approve	General
22	Removal of Vessels	Approve	General
23	Approved Categorical Exclusions	Deny	N/A
24	Indian Tribe or State Administered Section 404	Approve	General
	Program	<u> </u>	

26	Reserved	N/A	N/A
27	Aquatic Habitat Restoration, Establishment, and	Approve	General & Specific
	Enhancement Activities		
28	Modifications to Existing Marina	Approve	General
30	Moist Soil Management for Wildlife	Approve	General
31	Maintenance of Existing Flood Control Facilities	Deny	N/A
32	Completed Enforcement Actions	Deny	N/A
33	Temporary Construction, Access, and Dewatering	Approve	General
34	Cranberry Production Activities	Deny	N/A
35	Maintenance Dredging of Existing Basins	Deny	N/A
37	Emergency Watershed Protection and Rehabilitation	Approve	General & Specific
38	Cleanup of Hazardous and Toxic Waste	Deny	N/A
45	Repair of Uplands Damaged by Discrete Events	Approve	General
46	Discharges to Ditches	Approve	General & Specific
47	Reserved	N/A	N/A
48	Existing Commercial Shellfish Aquaculture Activities	Deny	N/A
49	Coal Remining Activities	Approve	General
50	Underground Coal Mining Activities	Approve	General
51	Land-Based Renewable Energy Generation Facilities	Approve	General & Specific
52	Water-Based Renewable Energy Generation Pilot Projects	Approve	General & Specific

This certification does not relieve the recipient of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160 (toll free at 877-928-3755) concerning the possible requirement of natural freshwater lake or floodway permits. In addition, you may wish to contact IDEM's Storm Water Permits program at 317-233-1864 concerning the possible need for a 327 IAC 15-5 (Rule 5) permit if you plan to disturb greater than one (1) acre of land.

This certification does not:

- (1) authorize impacts or activities outside the scope of this certification;
- (2) authorize any injury to persons or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
- (3) convey any property rights of any sort, or any exclusive privileges;
- (4) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
- (5) authorize changes in the plan design detailed in the application.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in enforcement action against the recipient of the certification. If an enforcement action is pursued, the recipient of the certification could be assessed up to \$25,000 per day in civil penalties. The recipient of the certification may also be

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subject to criminal liability if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

This certification is effective eighteen (18) days from the mailing of this notice unless a petition for review and a petition for stay of effectiveness are filed within this 18-day period. If a petition for review and a petition for stay of effectiveness are filed within this period, any part of the certification within the scope of the petition for stay is stayed for fifteen (15) days, unless or until an Environmental Law Judge further stays the certification in whole or in part.

This decision may be appealed in accordance with IC 4-21.5, the Administrative Orders and Procedures Act. The steps that must be followed to qualify for review are:

- 1. You must petition for review in writing that states facts demonstrating that you are either the person to whom this decision is directed, a person who is aggrieved or adversely affected by the decision, or a person entitled to review under any law.
- 2. You must file the petition for review with the Office of Environmental Adjudication (OEA) at the following address:

Office of Environmental Adjudication 100 North Senate Avenue IGCN Room N501 Indianapolis, IN 46204

3. You must file the petition within eighteen (18) days of the mailing date of this decision. If the eighteenth day falls on a Saturday, Sunday, legal holiday, or other day that the OEA offices are closed during regular business hours, you may file the petition the next day that the OEA offices are open during regular business hours. The petition is deemed filed on the earliest of the following dates: the date it is personally delivered to OEA; the date that the envelope containing the petition is postmarked if it is mailed by United States mail; or, the date it is shown to have been deposited with a private carrier on the private carrier's receipt, if sent by private carrier.

Identifying the certification, decision, or other order for which you seek review by number, name of the applicant, location, or date of this notice will expedite review of the petition.

Note that if a petition for review is granted pursuant to IC 4-21.5-3-7, the petitioner will, and any other person may, obtain notice of any prehearing conferences, preliminary hearings, hearings, stays, and any orders disposing of the proceedings by requesting copies of such notices from OEA.

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If you have procedural questions regarding filing a petition for review you may contact the Office of Environmental Adjudication at 317-232-8591.

If you have any questions about this certification, please contact Mr. Jason Randolph, Project Manager, at 317-233-0467, or you may contact the Office of Water Quality through the IDEM Environmental Helpline (1-800-451-6027).

Sincerely,

rang 2 Hall

Mary E. Hollingsworth, Branch Chief Surface Water, Operations & Enforcement Branch Office of Water Quality

cc: Norma Condra, USACE-Louisville Kerrie Kuhne, USACE-Detroit Paul Leffler, USACE-Chicago Mike Litwin, USFWS Liz McCloskey, USFWS Peter Swenson, USEPA Region 5 Matt Buffington, IDNR Nathan Saxe, INDOT

Attachment 1: Indiana Waters Designated for Special Protection

Designated Salmonid Waters:

- [327 IAC 2-1.5-5(a)(3)]
- Trail Creek and its tributaries downstream to Lake Michigan, LaPorte County
- East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch, Porter and LaPorte Counties
- Salt Creek above (upstream of) its confluence with the Little Calumet River, Porter County
- Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan, Porter County
- The Galena River and its tributaries, LaPorte County
- The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line, St. Joseph County
- The Indiana portion of the open waters of Lake Michigan
- Those waters designated by the Indiana Department of Natural Resources (IDNR) for putand-take trout fishing⁵

Waterbodies which have been designated all or partially as Outstanding State Resource Waters: [327 IAC 2-1-2(3) and 327 IAC 2-1.5-19(b)]

- The Blue River in Washington, Crawford, and Harrison Counties, from river mile 57.0 to river mile 11.5
- The North Fork of Wildcat Creek in Carroll and Tippecanoe Counties, from river mile 43.11 to river mile 4.82
- The South Fork of Wildcat Creek in Tippecanoe County, from river mile 10.21 to river mile 0.00
- Cedar Creek in Allen and DeKalb counties, from river mile 13.7 to its confluence with the St. Joseph River
- The Indiana portion of the open waters of Lake Michigan
- All waters incorporated in the Indiana Dunes National Lakeshore.

Waterbodies which have been designated all or partially as Exceptional Use Streams⁶: [listed in: 327 IAC 2-1-11(b) and IC 13-11-2-72.5 (before its repeal)]

- Big Pine Creek in Warren County downstream of the State Road 55 bridge near the town of Pine Village to its confluence with the Wabash River
- Mud Pine Creek in Warren County from the bridge on the County Road between Brisco and Rainsville to its confluence with Big Pine Creek
- Fall Creek in Warren County from the old C.R. 119 bridge in the NW quarter of Section 21, Township 22N, Range 8W downstream to its confluence with Big Pine Creek
- Indian Creek in Montgomery County from the County Road 650 West bridge downstream to its confluence with Sugar Creek
- Clifty Creek in Montgomery County within the boundaries of Pine Hills Nature Preserve
- Bear Creek in Fountain County from the bridge on County Road 450 North to its confluence with the Wabash River

⁵ Available on the internet at: <u>http://www.in.gov/dnr/fishwild/files/fw-Trout_Stocking_Locations.pdf</u>

⁶ As per IC 13-18-3-2(u): "Each exceptional use water (as defined in IC 13-11-2-72.5, before its repeal) designated by the board before June 1, 2009, becomes an outstanding state resource water on June 1, 2009, by operation of law."

- Rattlesnake Creek in Fountain County from the bridge on County Road 450 North to its confluence with Bear Creek
- The small tributary to Bear Creek in Fountain County within the Portland Arch Nature
 Preserve which enters Bear Creek at the sharpest bend and has formed the small natural
 bridge called Portland Arch
- Blue River from the confluence of the West and Middle Forks of the Blue River in Washington County downstream to its confluence with the Ohio River
- The South Fork of Blue River in Washington County from the Horner's Chapel Road bridge downstream to its confluence with Blue River.
- Lost River and all surface and underground tributaries upstream from the Orangeville Rise (T2N, R1W, Section 6) and the Rise of Lost River (T2N, R1W, Section 7) and the mainstem of the Lost River from the Orangeville Rise downstream to its confluence with the East Fork of White River.

Attachment 2: Critical Wetlands and Critical Special Aquatic Sites

In the interest of maintaining consistency with the State Regulated (Isolated) Wetland program established at 327 IAC 17, IDEM defines Critical Wetlands and Critical Special Aquatic Sites to be synonymous with Rare and Ecologically Important Wetland Types under 327 IAC 17-1-3(3)(B):

- Acid bog: Acid bog is an acidic wetland of kettle holes in glacial terrain. Bogs can be graminoid (Carex spp. and Sphagnum spp.) or low shrub (Chamaedaphne calyculata and Betula pumila). The graminoid bog can be a floating, quaking mat. The soils in acid bogs are saturated and acidic peat. Bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. When a sphagnum mat floats, it rises and falls with the water table. Acid bogs can be found in northern Indiana.
- Acid seep: Acid seep is a bog-like wetland typically found in unglaciated hill regions. This community is a small groundwater-fed wetland located primarily in upland terrain. A thin layer of muck may lie over a mineral substrate. The soil reaction is acid. This seep community is characterized by flowing water during at least part of the year. Acid seeps are located primarily in southern Indiana.
- Circumneutral bog: Circumneutral bog is a bog-like wetland that receives groundwater. Circumneutral bogs can be a mosaic of tall shrub bog, graminoid bog, and other communities. The graminoid bog often occurs on a quaking or floating mat. Although a few bogs occur in unglaciated regions, most are found in glacial ice-block depressions. The soils in circumneutral bogs are usually peat, or other low nutrient organic substrates, which are saturated and circumneutral to slightly acid. Circumneutral bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. Circumneutral bogs are usually found in northern Indiana.
- **Circumneutral seep:** The circumneutral seep (or seep-spring) is a groundwater-fed wetland on organic soil. It is primarily herbaceous. Species typically include marsh marigold (Caltha palustris) and skunk cabbage (Symplocarpus foetidus) with a scattered tree canopy. Circumneutral seep is typically situated on or near the base of a slope. The soil is typically circumneutral muck. This seep community is characterized by slowly flowing water during at least part of the year. Circumneutral seeps can be found scattered throughout Indiana.
- **Cypress swamp:** Bald cypress swamps are seasonally to permanently inundated wetlands found in depressions and sloughs of large bottomlands associated with the Wabash/Ohio River system. Poorly to very poorly drained soils characterize this environment. Bald cypress (Taxodium distichum) is present, and green ash (Fraxinus pennsylvanica), silver maple (Acer saccharinum), and overcup oak (Quercus lyrata) are also usually present. This community is restricted to extreme southwest Indiana.
- **Dune and swale:** Dune and swale is an ecological system consisting of a mixture of upland (black oak sand savanna, dry to mesic sand prairie) and wetland (pond, panne, sedge meadow, marsh, wet prairie) natural communities. These communities occur in long, narrow, linear complexes, with the dry communities occupying sand ridges, and the wet communities occurring in the intervening swales. Black oak (Quercus velutina), paper birch

(Betula papyrifera), jack pine (Pinus banksiana), and prairie vegetation typically occur on the ridges, and sedges, reeds, and marsh/aquatic vegetation line are found in the swales. Water levels are directly influenced by ground water, with the interdunal swales controlled largely by lateral flow through porous beach ridges. Dune and swale is restricted to extreme northwest Indiana, near Lake Michigan.

- Fen: Fen is a calcareous, groundwater-fed wetland. Fens are often a mosaic of grassy areas, sedgy areas, graminoid-shrubby cinquefoil, and tall shrub areas. The extent of the tall shrub component of fens may be determined by fire frequency and/or soil moisture. Drying of the soil increases the growth of shrubs. Fens typically occur in the vicinity of glacial moraines. Fens typically have a muck or peat substrate. The water level fluctuates seasonally and is fed by groundwater. Fens can be found in central and northern Indiana.
- Forested fen: Forested fen is a tree-dominated wetland on organic soil which receives groundwater. Forested fens are often a mosaic of treed areas, tall shrub areas, and herbaceous areas. A tall shrub layer is often well developed in forested fens. Indicative species typically include tamarack (Larix Iaricina), black ash (Fraxinus nigra), yellow birch (Betula alleghaniensis), poison sumac (Toxicodendron vernix), and red maple (Acer rubrum). Forested fens occur in wet lowlands, where moraines meet outwash features or depressions. Forested fens have saturated, poorly to very poorly drained soils that are often muck, but some seasonal flooding can occur in forested fens that are especially level. This community is a late successional stage of fen or circumneutral bog. Forested fens occur in northern Indiana.
- Forested swamp: Forested swamp is a seasonally inundated to intermittently exposed wetland of large river bottoms. Forested swamps do not receive direct flow from river flooding except under exceptional circumstances. Forested swamps occur in depressions, sloughs and large bottomlands, typically dominated by tree species such as swamp cottonwood (Populus heterophylla), green ash (Fraxinus pennsylvanica), and swamp white oak (Quercus bicolor). In northern Indiana important tree species include black ash (Fraxinus nigra), yellow birch (Betula alleghaniensis), and red maple (Acer rubrum). Poorly to very poorly drained and aerated soils characterize the swamp environment. Soils usually are mineral not muck or peat. This community type is found throughout Indiana.
- **Marl beach:** Marl beach is a fen-like community located on the marly muck shorelines of lakes. Marl precipitate is evident. A thin layer of water is present in spring, but dries down in summer. Draw-down of a lake creates additional area for this community to develop on. Marl beaches can be found in extreme northern Indiana, primarily in the northeast.
- **Muck flat:** Muck flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a peat substrate. The muck flats can float on the water surface, but during high water periods are usually inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Muck flats are found in northern Indiana.
- **Panne:** Panne is a groundwater fed herbaceous wetland occupying interdunal swales near Lake Michigan. Pannes are located on the lee side of the first or second line of dunes from

the lakeshore. The soil is wet, calcareous sand. Pannes are located in counties bordering Lake Michigan.

- Sand flat: Sand flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a sand substrate. During high water periods sand flats at the margins of lakes or ponds are inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Sand flats occur in northern Indiana, and in the Plainville Sand Section of southwest Indiana.
- Sedge meadow: Sedge meadow is an herbaceous wetland typically dominated by graminoid species such as flat sedge (Cyperus spp.), spike rush (Eleocharis spp.), rushes (Juncus spp.) and sedges (Carex spp.). Sedge meadow is an herbaceous wetland of stream margins and river floodplains, and lake margins or upland depressions. Streamside sedge meadows are frequently flooded in the spring and early summer. Sedge meadows of lake margins and depressions often contain standing water during wet months and after heavy rains; during dry periods, the water level is at or just below the substrate. Sedge meadow usually occupies the ground between a marsh and the uplands, or a shrub swamp or wet forest. Periodic high water can kill trees and shrubs invading sedge meadows. Sedge meadows can be found in the northern half of the state.
- Shrub swamp: Shrub swamp is a shrub-dominated wetland that is seasonally inundated to intermittently exposed. This community occurs in depressions and the substrate in either mineral soils or muck, as opposed to peat which is characteristic of bogs. Shrub swamp is characterized by non-flowing or very slowly flowing water with levels that fluctuate seasonally. Shrub swamps are persistent, though considered successional. Two opportunistic native shrubs, sandbar willow (Salix exigua) and gray dogwood (Cornus racemosa), by themselves, are not indicative of shrub swamps. This community type is found throughout Indiana.
- **Sinkhole pond:** Sinkhole ponds are water-containing depressions in karst topography. Sinkhole ponds are found in the Mitchell Karst Plain in south-central Indiana.
- **Sinkhole swamp:** Sinkhole swamps are depressions in karst topography dominated by tree or shrub species. Sinkhole swamps are found in the Mitchell Karst Plain in south-central Indiana.
- Wet floodplain forest: Wet floodplain forest is a broadleaf deciduous forest of river floodplains. Wet floodplain forests occur in depressions and flats on narrow to wide floodplains and also on recently exposed substrates that are frequently flooded. Wet floodplain forests are frequently flooded and may have standing water seasonally to permanently present. Wet floodplain forests occur statewide.
- Wet prairie: Wet prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (Spartina pectinata), bluejoint (Calamagrostis canadensis), and sedges (Carex spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet prairies occur in deep swales and the substrate ranges from very deep black mineral soils (which are high in organic matter) to muck. Ponding in spring lasts for several weeks prior to drainage. Wet

prairies commonly occur in the Grand Prairie Natural Region, the Tipton Till Plain and the Bluffton Till Plain, with a few examples found in the Northern Lakes Natural Region.

• Wet sand prairie: Wet sand prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (Spartina pectinata), bluejoint (Calamagrostis canadensis), and sedges (Carex spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet lowland prairies occur in deep swales and the substrate is sand, sometimes mixed with muck. Flooding is a regular springtime occurrence in wet sand prairie and may last several weeks. This community occurs in a mosaic with marsh and other wetlands, and with upland prairies and sand savannas. Fire was frequent occurrence, but more common in the fall when waters had receded. This community occurs in northwest Indiana and in the Plainsville Sands area.

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